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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11 29 2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,629

Applicant(s)

CARKEEK, STEPHEN ROBERT

Examiner

Alexis Wachtel

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-832)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6, 9
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other _____

Detailed Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21-27 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a surface counter mat layer made of tufted textile and a needlefelt textile, does not reasonably provide enablement for a knit or microknit textile. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to carry out the invention commensurate in scope with these claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 48 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 48, Applicant fails to describe what is meant by phrase "Table or counter mat... with the high density being about 200 to 600 grams per square meter". Examiner assumes Applicant meant to say "Table or counter mat... with the synthetic textile surface being high density being about 200 to 600 grams per square meter".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-6,8,12 and 47 are rejected under 35 U.S.C. 102(a) as being anticipated by US 5,725,705 to Nagahama et al.

Nagahama et al is directed to dust control mats and teaches a mat comprising a base fabric, piles implanted on one surface of the base fabric, and an elastomer backing applied to the non-pile surface of the base fabric, wherein the base fabric comprises a base of a woven fabric or a nonwoven fabric and a floss-like nonwoven fiber layer bonded to the base, said floss-like nonwoven fiber layer contains low-melting fibers, and the floss-like nonwoven fiber layer after the pile yarns are implanted is thermally fixed (Col 2, lines 19-27). The elastomer backing layer is made of SBR, NBR or the like. (Col 1, lines 31-32). The elastomer or rubber layer has a thickness of 1.8mm (Col 7, lines 37-38) and has a density range from 500 to 4000g/m² (Col 6, lines 53-54). An adhesive agent such as ethylene acetate can be applied to the base sheet (Col 6, lines 47-52) wherein the adhesion by curing is carried out at temperatures from 100° to 200° C (Col 6, lines 58-60). The base is made of a nonwoven fabric wherein the fibers used can be any synthetic fiber such as polyester fiber (Col 4, lines 55-57). Said base has a weight from 50 to 500 g/m² (Col 5, lines 6-7). Said mat expresses characters (Col 3, lines 57-59). Piles implanted on said mat can be

lines 64-67, Col 6, lines 1-3). The resulting pile surface has a density of 880 g/m² (Col 7, lines 23-24). The mat can be produced as a unitary structure by simultaneously bonding and curing the rubber backing to the textile base in a pressurized mold (Col 6, lines 40-46) at temperature from 100° to 200°C (Col 6, lines 58-60). The preamble limitation "A table or counter mat... for resting cups, mugs or glasses" of claim 1 is not given any patentable weight. In addition, by virtue of Nagahama et al's mat structure, his mat would inherently have absorbance properties as well as the capability to operate with a load force applied to its surface.

Claim Rejections - 35 USC § 102/103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 9 and 10 are rejected under 35 U.S.C. 102(a) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over 5,725,705 to Nagahama et al in

The features of Nagahama et al have been set forth above.

The method limitation of article claim 9 is given no patentable weight since a printing process does not materially differentiate the final product's structure from the prior art printed structure. All methods of printing result in a printed product. Nagahama et al's mat is capable of being laundered (Col 3, lines 30-33).

Alternatively, if aforementioned limitations are given weight, Nagahama et al fails to teach printing characters on Nagahama et al's mat via dye sublimation printing at temperatures greater than 170°C. "Introductory Textile Science Fifth Edition" by Marjory L. Joseph is directed to textile technology and teaches the conventionality of sublimatic transfer printing (dye sublimation printing) (pp. 348, Transfer Printing, lines 8-10) wherein dyes are printed on paper to make the desired pattern after which, said paper and fabric to be printed are pressed together at a temperature and pressure that will cause said dyes to sublimate on surface of said fabric. It is relevant to point out to Applicant that the temperatures at which successful sublimatic transfer printing occurs depends on the specific type of dye and fiber used and as such Applicant's claimed temperatures are known and obvious. It would have been, in addition, obvious to one of ordinary skill in the art at the time the invention was made to have used a sublimatic transfer printing process to print lettering on Nagahama et al's mat, motivated by the desire to use a well known and cost effective process (pp. 349, lines 17-21).

10. Claims 14,15 are rejected under 35 U.S.C. 102(a) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over 5,725,705 to Nagahama et al in

The features of Nagahama et al have been set forth above.

The method limitation of ~~method~~ of claim 14 is given no patentable weight since a printing process does not ^{materially} ~~manipulatively~~ effect the final product's structure. All methods of printing result in a printed product. Nagahama et al's mat is capable of being laundered (Col 3, lines 30-33).

In the alternative, if given patentable weight, Nagahama et al fails to teach printing characters on Nagahama et al's mat via an acid dye process. "Introductory Textile Science Fifth Edition" by Marjory L. Joseph is directed to textile technology and teaches the conventionality of using acid dyes to dye fabrics. Acid dyes exhibit varying degrees of colorfastness. The selection of an acid dye would thus depend on the use of the fabric, anticipated method of maintenance and type of colorfastness properties desired (pp 325, right column, last paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used acid dye printing principles, motivated by the desire to use a highly efficient and thus, cost effective printing process.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,725,705 to Nagahama et al in view of US 4,242,394 to Leib et al.

The features of Nagahama et al have been set forth above.

Nagahama et al fails to teach use of polyester fibers as tuft material.

Leib et al is directed to tufted pile fabrics and teaches the conventional use of polyester or nylon for tufts in tufted pile fabrics (Col 2, lines 30-32). They are thus shown to be equivalent in the carpet art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted polyester fibers in Nagahama et al's mat for the nylon fibers since polyester and nylon have been shown to be art recognized equivalents. One of ordinary skill in the art would have been motivated by the desire to use fiber material that is widely available or cost effective.

13. Claim 13, 28-37, 41-44, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,725,705 to Nagahama et al in view of US 5,605,108 to Woosley.

Nagahama et al fails to teach a pile density of about 600 g/m^2 . Woosley is directed to carpets and teaches pile density ranging from 5 and 30 ounces per square yard or 153 g/m^2 and 9154 g/m^2 . It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used Woosely's pile density. motivated by the desire to save material and production costs while maintaining product performance.

With regards to claim 29, 42. Nagahama et al and Woosley et al fail to teach the

thickness ratios of the rubber layer and pile surface layer affects the strength and stability of the resulting mat, it would have been obvious to have optimized the ratios through the process of routine experimentation.

With regards to claim 32, 41 and 44, Nagahama et al and Woosley et al fail to teach the claimed thickness of the rubber layer. Since the rubber layer's thickness necessarily affects the mat's durability and longevity, it would have been obvious for one of ordinary skill in the art at the time of the invention to have selected the most optimal thickness of the rubber layer for the desired utility through the process of routine experimentation.

With regards to claim 36, Nagahama et al and Woosley et al fail to disclose the density per square meter of the polyester nonwoven base fabric. Since the stability of the pile attached to the base fabric is affected by the stability of the base fabric, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have selected the appropriate base fabric density that most readily and effectively stabilizes the pile surface implanted thereon, as determined through the process of routine experimentation.

Regarding claim 36, although the claimed tensile strength, maximum elongation and tear strength of the polyester nonwoven base fabric are not explicitly taught by Nagahama et al and Woosley et al, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. polyester) and in the similar production steps

(i.e. forming polyester nonwoven) used to produce the polyester nonwoven fabric. The burden is upon the Applicant to prove otherwise.

With regards to claim 45, Nagahama et al and Woosley et al fail to teach the claimed height range of the pile surface. Since the height of the pile affects the resulting mat's ability to remove dirt or dust in its desired utility, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have optimized the pile surface height as determined through the process of routine experiment.

14. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,725,705 to Nagahama et al in view of US 5,605,108 to Woosley and US 4,242,394 to Leib et al.

Nagahama et al and Woosley fail to teach use of polyester fibers as tuft material. Leib et al is directed to tufted pile fabrics and teaches the conventional use of polyester or nylon for tufts in tufted pile fabrics (Col 2, lines 30-32). They are thus shown to be equivalent in the carpet art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted polyester fibers in Nagahama et al's mat for the nylon fibers since polyester and nylon have been shown to be art recognized equivalents. One of ordinary skill in the art would have been motivated by the desire to use fiber materially that is widely available or cost effective.

15. Claims 7,16,17,18,19,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,725,705 to Nagahama et al in view of US 5,605,108 to Woosley and US 4,609,580 to Rockett et al.

Nagahama et al and Woosley et al as set forth above fails to teach that the top textile surface of the mat is made of a polyester nonwoven with the claimed pile height. Rockett et al is directed to floor mats used to remove dirt (Col 1, lines 5-14) and teaches that mats in the dirt removing mat utility can have a durable nonwoven wear surface (Col 2, lines 10-15). Since Rocket et al describes a nonwoven surface as equivalent to the known mat surfaces used, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have replaced the polyester pile surface of the Nagahama and Woosley et al with a pile nonwoven surface motivated by the desire to make use of a material that is widely employed or cost effective.

In addition it would have been obvious for one of ordinary skill in the art to have employed the claimed pile length since selecting this parameter would have been provided through the process of routine experimentation as a means of optimizing the dirt removing properties of the resulting mat.

With regards to claim 27 although the claimed absorbency of the polyester knit are not explicitly taught by Nagahama et al, Woosley et al and Rocket et al, it is reasonable to presume that said limitations would be met by the combination of the three references. Support for said presumption is found in the use of similar materials (i.e. non-slip layer, nonwoven support layer and knitted top layer) and in the similar production steps (i.e. consolidating mat layers by compressing under heat and pressure) used to produce the mat. The burden is upon the Applicant to prove otherwise.

16. Claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,725,705 to Nagahama et al in view of US 5,605,108 to Woosley and us 4,804,567 to Reuben et al.

Nagahama et al and Woosley et al as set forth above fails to teach that the top textile surface of the mat is made of a polyester knit fabric. Reuben et al is directed to automobile mats and teaches that it is conventionally known to employ knitted surfaces for the mats (Col 4, lines 63-66). In view of this teaching it would have been obvious to have replaced the tufted polyester surface of the Nagahama et al and Woosley et al's mat with a knitted having the same thickness range as the tufted polyester surfacemotivated by the desire to make use of a functionally equivalent material as well as making use of a highly available or cost effective material useful in the ma utility. Absent any definition of "micro-knit" or "warp-knit fabric", Examiner assumes that the knit fabric of Reuben et al can be either a micro-knit or warp-knit fabric.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1771

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alexis Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Thursdays from 9:30am to 7:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



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